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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An antenna comprised of a crossed pair of planar center-fed end-loaded bent-dipole radiators, said dipole radiators lying in a plane, with said radiators being bent out of said plane at the distal ends thereof, said radiators being which are structurally embedded into in a ground plane on top of a cavity having conductive sidewalls, whereby broadband, dual independent polarized, and hemisphere field-of-view coverage are provided.
2. (Canceled)
3. (Canceled)
4. (Currently Amended) The antenna of Claim 1, ~~comprising:~~ wherein said a ground plane is slotted;  
an aperture in the ground plane;  
a cavity opened to said aperture and extending below said ground plane;  
said dipole radiators comprising a bow tie antenna having planar bow tie elements located between slots in said ground plane in said aperture, the distal ends of said bow tie elements spaced from said ground plane so as to form a slot between the distal end of a bow tie element and said ground plane, said bow tie antenna elements lying in a direction parallel to the plane of ~~the~~ said ground plane; and,

a ~~downwardly-depending vertical~~ plate at the distal end of each of said bow tie elements depending downwardly out of the plane of said planar bow tie element, said ~~downwardly-depending vertical plate~~ plates lowering the low frequency cutoff of said antenna.

5. (Canceled)

6. (Currently Amended) The antenna of Claim 2 4, and further including a second bow tie antenna orthogonal to said first bow tie antenna, said second bow tie antenna having respective ~~downwardly-depending vertical~~ plates at the distal ends of the bow tie elements thereof.

7. (Currently Amended) The antenna of Claim 2 4, and further including a second bow tie antenna coplanar with the first bow tie elements of said first-mentioned bow tie antenna and orthogonal thereto in a quad configuration.

8. (Previously Presented) The antenna of Claim 7, wherein adjacent edges of the bow tie elements of said first and second bow tie antennas define a slot.

9. (Currently Amended) The antenna of Claim 1, wherein said bent dipole antenna radiators ~~includes~~ include a bow tie antenna.

10. (Previously Presented) The antenna of Claim 9, wherein said bent dipole antenna includes a pair of crossed bow tie antennas.

11. (Canceled)

12. (Canceled)

13. (Currently Amended) A method for decreasing the low frequency cutoff of a broadband, low-observable, conformal antenna embedded in a cavity and having orthogonally-oriented planar bow tie elements, comprising the step of electrically coupling to the distal ends of the bow tie elements to respective downwardly-depending ~~vertical~~-plates bent out of the plane of the planar bow tie elements at the distal ends thereof, the plates serving to extend the effective size of the antenna at the low frequency end thereof.

14. (Canceled)